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REMARKS

By this response, claims 1-12 have been cancelled, without prejudice, due to a restriction requirement. Claim 40 has been amended. Accordingly, claims 13-42 are pending in this application.

Claim Objection

In the Office Action, claim 40 was objected to as being a substantial duplicate of claim 28. Claim 40 has been amended to depend from claim 33. Accordingly, withdrawal of this objection is respectfully requested.

Claim Language

Regarding the Examiner's term construction, please note that as provided for in the specification on page 9, paragraph [0029], the term "pitch" is defined as the sum of the land and channel widths. Additionally, the term "wiggle" in the specification on page 14, paragraph [0043], is defined as a multiple of alternating angles. Accordingly, the examination of the present invention should be made in accordance with the terms pitch and wiggle as defined by the specification, and not as suggested by the Examiner.

Claim Rejection - 35 USC § 112

In the Office Action, claim 30 is rejected as being indefinite. In view of the definition for "pitch" provided for in the specification, this rejection is believed moot. Withdrawal is respectfully requested.

Claim Rejection - 35 USC § 102

Gurau et al.

In the Office Action, claims 13-22, 26-28, 30, 31, 33, 35-37 and 40-42 are rejected as anticipated by Gurau et al. WO 02/037592, hereafter "Gurau et al." This rejection is respectfully traversed in view of the following comments.

Gurau et al. fail to disclose each and every limitation of the claimed invention. In particular, Applicants note that the cathode and anode collector (flow field) plates of Gurau et al. are all provided with the same pattern, and hence plates separated by a membrane electrode assembly (MEA) will have the same cross-section and pitch.

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Nowhere in Gurua et al. is it disclosed or suggested that a pitch (i.e., the sum of the land and channel widths) of a cathode flow field plate, separated by a MEA, is less than the pitch of an anode flow field plate. Furthermore, nowhere is it disclosed or suggested channels between two plates that are separated by a MEA have the same channel cross-section, yet one plate has a channel pitch greater than the other plate. Independent claim 13 recites, *inter alia*, the limitation of "a pitch defined by said first flow field plate is less than a pitch defined by said second flow field plate." Independent claim 42 recites, *inter alia*, the limitations of "said second channels define a cross sectional width approximately equal to a cross sectional width defined by said first channels, said second flow field plate defines a channel pitch substantially greater than a channel pitch defined by said first flow field plate." As Gurau et al. fail to disclose or suggest such limitations, withdrawal of this rejection is respectfully requested.

Suzuki et al.

In the Office Action, claims 13, 23-25, 29, 30-32 and 34 are rejected as anticipated by Suzuki et al. U.S. Pre-Grant Publication No. 2002/0004158, hereafter "Suzuki et al." This rejection is respectively traversed in view of the following comments.

Suzuki et al. fail to disclose each and every limitation of the claimed invention. In particular, Applicants note that the cathode and anode separators (i.e., flow field plates), indicated as symbol 1 in FIG. 6 of Suzuki et al. are all provided with the same pattern, and hence the separators sandwiching the membrane electrode assembly (MEA)(elements 10, 11, and 12 in FIG. 6) will have the same cross-section and pitch. Nowhere in Suzuki et al. is it disclosed or suggested that a pitch (i.e., the sum of the land and channel widths) of a cathode flow field plate, separated by a MEA, is less than the pitch of an anode flow field plate. Furthermore, nowhere is it disclosed or suggested channels between two plates that are separated by a MEA have the same channel cross-section, yet one plate has a channel pitch greater than the other plate. Independent claim 13 recites, *inter alia*, the limitation of "a pitch defined by said first flow field plate is less than a pitch defined by said second flow field plate." Independent claim 42 recites, *inter alia*, the limitations of "said second channels define a cross sectional width approximately equal to a cross

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sectional width defined by said first channels, said second flow field plate defines a channel pitch substantially greater than a channel pitch defined by said first flow field plate." As Suzuki et al. fail to disclose or suggest such limitations, withdrawal of this rejection is respectfully requested.

Wilkinson et al.

In the Office Action, claims 13, 23-25, 29, 30-32 and 34 are rejected as anticipated by Wilkinson et al. U.S. Pre-Grant Publication No. 2001/0004281, hereafter "Wilkinson et al." This rejection is respectively traversed in view of the following comments.

Wilkinson et al. fail to disclose each and every limitation of the claimed invention. In particular, Applicants note that the cathode and anode flow field plates, indicated as symbols 9 and 10 in FIG. 1 of Wilkinson et al. are provided with the same channel and land pattern, and hence the plates sandwiching the membrane electrode assembly (MEA)(elements 2, 3, 4 in FIG. 1) will have the same cross-section and pitch. Nowhere in Wilkinson et al. is it disclosed or suggested that a pitch (i.e., the sum of the land and channel widths) of a cathode flow field plate, separated by a MEA, is less than the pitch of an anode flow field plate. Furthermore, nowhere is it disclosed or suggested channels between two plates that are separated by a MEA have the same channel cross-section, yet one plate has a channel pitch greater than the other plate. Independent claim 13 recites, *inter alia*, the limitation of "a pitch defined by said first flow field plate is less than a pitch defined by said second flow field plate." Independent claim 42 recites, *inter alia*, the limitations of "said second channels define a cross sectional width approximately equal to a cross sectional width defined by said first channels, said second flow field plate defines a channel pitch substantially greater than a channel pitch defined by said first flow field plate." As Wilkinson et al. fail to disclose or suggest such limitations, withdrawal of this rejection is respectfully requested.


Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. The Examiner is encouraged to

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contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,
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